WHAT IS CLAIMED IS:

1. A method for treating major depression in a human patient, comprising genotyping the patient for the presence or absence of a gene encoding apolipoprotein E4 and adapting treatment of the person differentially depending on the presence or absence of said gene.

2. The method according to claim 1, wherein treatment is adapted by administering to the person in whom the apoliprprotein E4 gene is present a noradrenergic transmission enhancing, anti-depressant drug in an amount effective to treat depression.

3. The method according to claim 2, wherein in that the noradrenergic transmission enhancing, anti-depressant drug is mirtazapine.

4. The method according to claim 3, wherein said mirtazapine is administered in an amount ranging from 15 to 45 mg per day.

5. The method according to claim 1, wherein genotyping the patient for the presence or absence of a gene for apolipoprotein E4 comprises assaying to determine the type and number of apolipoprotein E alleles present.

6. The method according to claim 5, wherein said assaying may be carried out by nucleic acid sequencing of DNA.

7. The method according to claim 6, wherein said nucleic acid sequencing comprises restriction isotyping.

8. The method according to claim 5, wherein said assaying comprises determining which apolipoprotein isoforms are present in the patient's plasma.

9. A method for identifying human patients suffering from depression for whom depression may be successfully treated by administering an effective amount of a noradrenergic transmission enhancing, anti-depressant drug, comprising genotyping the patient for the presence or absence of a gene encoding apolipoprotein E4 and selecting those patients in whom the gene is present as being susceptible to treatment by administration of said drug.

10. A method for predicting successful treatment of a human patient suffering from depression by administration of a noradrenergic transmission enhancing, anti-depressant drug, comprising genotyping the patient for the presence or absence of a gene encoding apolipoprotein E4, whereby the presence of the gene is predictive of successful treatment.